

Claim 10 was rejected under 35 U.S.C. §112, first paragraph. The Examiner stated that “the specification never discloses the optical film further including a means for increasing the illumination.”

Claim 10 has been canceled, without prejudice. The claimed feature of ‘increasing illumination within the viewing angles of around 35 degrees and around 55 degrees’ has been incorporated in claim 8, to further define that claim. Applicant respectfully submits that the claimed feature of ‘increasing illumination within the specified viewing angles’ has been described in considerable detail in the specification to convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. For example, column 5, lines 4 to 32 discloses the use of the claimed film to increase the luminance of light within the specified viewing angle. Column 6, lines 18 to 62 describes positioning of two optical films at various angles to increase the luminance within the viewing angles of 35 degrees and 55 degrees.

Claims 8 to 27 were rejected under 35 U.S.C. §251 as improperly broadened in a reissue application. MPEP §1412.01-recapture rule, was also cited in the rejection.

With respect to claims 8 and 9, the Examiner stated:

“claim 9 adds to claim 8 the top angle of the isosceles triangle prisms is in a range of about 90 degrees to about 120 degrees. Claim 8 and 9 limitations are found in originally filed claims 1 to 2...prosecution history of claims 1 to 2 follows. The originally filed claims 1 to 2 were rejected in paper no. 6 of patented application. The applicant then canceled claim 2 and amended claim 1 by adding a range of 95 degrees to 120 degrees (paper no. 8). The Applicant later added to claim 1 the prisms having smooth surfaces (paper no. 13). The Examiner then finally rejected claim 1 which included the smooth prism and range of 95 degrees to 120 degrees. After an interview with the applicant’s representative, the Examiner indicated that the claims as amended appeared to be allowable (paper no. 15) in the amendment the applicant canceled claims 1, 3, 6, 9, 13 and 15 to 21. The amended claims included a

range of 95 degrees to 120 degrees and the applicant argued the criticality of this range in paper no. 16. The prosecution history clearly shows claims that were canceled or amended which are now sought by the reissue application.”

The rejection is respectfully traversed.

The recapture rule is applicable to “prevent a patentee from regaining through reissue...subject matter that he surrendered in an effort to obtain allowance of the original claims.” In Re Clement 131 F.3rd at 1368, 45 USPQ 2nd at 1164.

MPEP §1412.02 recites in part the principles governing recapture as stated by the Federal Circuit in Clement, 131 F.3rd at 1464:

(3)(b). If the reissue claim is narrower in an aspect germane to a prior art rejection, and broader in an aspect unrelated to the rejection, the recapture rule does not bar the claim. }

Applicant respectfully disagrees that the recapture rule bars the subject matters of claim 8 or 9.

In reissue claim 8, the claim element of “a top angle in the range of 95 degrees to 120 degrees” found in each claim of the patent is missing. Thus, claim 8 is broader than the claims in the patent in this respect. Applicant respectfully submits that this element was not surrendered in an effort to obtain allowance of the original patent claims. Reissue claim 8 as amended includes the feature of “increasing illumination within a viewing angle of about 35 degrees in the vertical direction and about 55 degrees in the horizontal direction.

Reissue claim 9 claimed a top angle in the range of 90 degrees to 120 degrees. Claim 9 has been amended to incorporate the elements of claim 8 before the present amendment.

Applicant respectfully submits the reissue claims 8 and 9 as amended are narrower in an aspect germane to a prior art rejection and/or broader in an aspect unrelated to the

rejection. This can be seen from a chronology of the prosecution of the subject matters pertinent to amendments in claims 8 and 9, including the top angle feature.

1. Claim 2 as originally filed included a top angle range of 90 degrees to 110 degrees. The first rejection of claim 2 was in paper no. 6, page 6, in which the Kashima EP 534140 reference was applied to reject claim 2. The Examiner pointed to the disclosure in Kashima '140 as disclosing a preferred angle of 90 degrees to 110 degrees.

2. In response (paper no. 8), applicant canceled claim 2 and amended claim 1 and changed the range from '90 degrees to 120 degrees' to '95 degrees to 120 degrees'. In the same response, applicant argued (successfully) that Kashima '140 has a filing date after the effective filing date of the then present application and therefore Kashima '140 was not prior art to the invention.

No argument was made or any reason was given for the change in the range of the top angle of the prism from '90 degrees to 120 degrees' to '95 degrees to 120' degrees. Thus, even if Kashima '140 was applicable prior art, the change from '90 degrees' to '95 degrees' would not have been the basis for distinguishing from a disclosure of '90 degrees to 110 degrees' in Kashima '140. Therefore, no argument regarding the criticality of the range of top angle was made to obtain allowance of the claim in this response.

3. In paper no. 9, office action dated June 29, 1995, claim 1 was rejected based on Kashima '351. The Examiner stated that "Kashima '351 discloses that the front surface has protrusions such as prisms or convex lenses with angles preferably 90 to 110 degrees, however lacking from the disclosure are details of the prisms (being isosceles or quadrangular)."

4. In applicant's response (paper no. 10), claim 1 was amended to add the prisms having smooth surfaces. In his remarks, applicant stated that "none of the prior art teaches or suggests top angle in the range of 95 degrees to 120 degrees...Kashima mentions only

an angle in the range of 80 to 150 degrees." This amendment and argument was rejected by the Examiner.

5. In paper no. 14, office action of April 19, 1996. Kashima '351 was again applied in rejecting claim 1. The Examiner indicated that it would have been obvious to combine Kashima '351 with Ooi to arrive at the details of the prism (being isosceles or quadrangular) as claimed.

By the time of this rejection (paper no. 14), the top angle feature, whether 90 degrees to 120 degrees or 95 degrees to 120 degrees, was not an issue. The issue was the 'prisms and their details'.

6. In response to the final rejection (paper no. 16), applicant canceled claim 1, but the main elements of the then pending claim 1, including "a film having a wave structure including a plurality of regularly spaced isosceles triangle prisms arranged side by side, the prisms having smooth surfaces, wherein a top angle of the isosceles triangle prisms is in a range of 95 degrees to 120 degrees," were not canceled. Instead, these elements were combined with the elements of the then pending claim 5, such as the liquid crystal display device including a light source, a light guide, and a reflector. In applicant's remarks therein, it was pointed out that the viewing angle of 35 degrees in the vertical and 55 degrees in the horizontal is maximized by the film having an optically rough bottom face to first diffuse the light and the second smooth angled top face to concentrate the diffused light into the conical space defined by the vertical and horizontal viewing angles. The criticality of applicant's arguments centered on Kashima's failure to disclose wave structured isosceles triangles with top angles made by the intersection of flat, angled surfaces to form prisms. As such, Kashima cannot provide a more uniform distribution of light over the specified receiving angle.

7. Applicant's amendment and argument gained allowance of the claims. A Notice of Allowance was issued.

It can be seen from the prosecution history that the criticality argued to gain allowance centered on the features of 'a wave structure including a plurality of regularly spaced isosceles triangular prisms arranged side-by-side' found in each patented claim. The features of having uniform distribution of light over the receiving angle of 35 degrees and 55 degrees were also critically argued but not claimed.

Reissue claim 8 now includes the feature of the viewing angles argued critically to gain allowance of the application claims. The top angle range, whether 90 degrees or 95 degrees to 120 degrees, was not the point of criticality in terms of obtaining allowance of any claim in the patent. As such, although removing or changing the top angle from '95 degrees to 120 degrees' to '90 degrees to 120 degrees' makes the reissue claim broader than the patent claims, such claim feature is broader in an aspect unrelated to the rejection. And, the feature of viewing angle of 35 degrees and 55 degrees now added to the claim is narrower in an aspect germane to a prior art rejection in the patent. Accordingly, applicant respectfully submits that the amendment in claim 8 falls squarely within the pronouncement of the Federal Court and in accord with MPEP § 1412.02 as a permissible reissue claim.

Reissue claim 9 has been amended to incorporate the elements of reissue claim 8 prior to the present amendment. As explained above, it is the structure of the prisms, and not the specific range of the top angle, which distinguished the present invention from the main reference Kashima. Indeed, Kashima broadly disclosed a "vertical angle being in a range of 40 to 170 degrees, preferably 80 to 150 degrees, further preferably 85 to 120 degrees, further more preferably 90 to 110 degrees" (col. 3, lines 27 to 37). If this disclosure in Kashima was applicable in rejecting the original claims, both the claimed angle range of '90 degrees to 120

degrees' or '95 degrees to 120 degrees' would have been within the range specified in Kashima. Accordingly, the claimed feature related to a range of top angle of the prism could not have been germane to the rejection. Thus, removal or amendment of such feature in a reissue claim should not be barred by recapture under MPEP §1412.02. The Examiner's reconsideration of the rejection is respectfully requested.

Claims 13 and 20 are silent with respect to a top angle having a range of '90 degrees to 120 degrees' but each claim includes details of the prisms. Claim 20 further claims the viewing angle of about 35 degrees in the vertical and about 55 degrees in the horizontal of the display. These claims are proper reissue claims for the same reasons given for claim 8 above.


Claims 11 and 12 depend upon claim 8, claims 14 to 19 depend directly or indirectly upon claim 13, and claims 21 to 27 depend upon claim 20. The dependent claims are reissuable for the same reasons given for their reissuable independent claims.

For the foregoing reasons, claims 1 to 9 and 11 to 27 of the application are believed to be reissuable. The Examiner's early and favorable action is respectfully urged. Should the Examiner believe that a telephone or personal interview may facilitate resolution of any remaining matters, it is requested that the Examiner contact Applicant's undersigned attorney.

Respectfully submitted,

F. CHAU & ASSOCIATES, LLP

F. CHAU & ASSOCIATES, LLP
1900 Hempstead Turnpike, Suite 501
East Meadow, New York 11554
Tel: (516) 357-0091
Fax: (516) 357-0092
FC:ms



Frank Chau
Reg. No. 34,136
Attorney for Applicants